

ABSTRACT

According to one exemplary embodiment, a high-k dielectric stack situated between upper and lower electrodes of a MIM capacitor comprises a first high-k dielectric layer, where the first high-k dielectric layer has a first dielectric constant. The high-k dielectric stack further comprises an intermediate dielectric layer situated on the first high-k dielectric layer, where the intermediate dielectric layer has a second dielectric constant. According to this exemplary embodiment, the high-k dielectric stack further comprises a second high-k dielectric layer situated on the intermediate dielectric layer, where the second high-k dielectric layer has a third dielectric constant. The second dielectric constant can be lower than the first dielectric constant and the third dielectric constant. The high-k dielectric stack further comprises first and second cladding layers, where the first cladding layer is situated underneath the first high-k dielectric layer and the second cladding layer is situated on the second high-k dielectric layer.